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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,566	02/27/2004	Neal F. Vittitoe	2003-0173.02/4670-238	9095

7590 11/27/2007
LEXMARK INTERNATIONAL, INC.
ATT: JOHN J. McARDLE, JR.
740 WEST NEW CIRCLE ROAD
LEXINGTON, KY 40550

EXAMINER

WASHINGTON, JAMARES

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/788,566

Applicant(s)

VITTITOE, NEAL F.

Examiner

Jamare Washington

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 12, 2007 has been entered.

Response to Amendment

Applicant's amendments and response received on October 12, 2007 have been entered. Claims 1, and 3, and 5-7 are currently pending with claims 2 and 4 having been canceled. Claims 1, 3, and 5 have been amended to further distinguish applicant's invention over the art of record. Applicant's amendments and response are addressed hereinbelow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3, and 5-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Regarding claim 1, applicant claims "...overriding a previously established font sharpening threshold and substituting said user-defined font sharpening threshold." This limitation was not found by examiner in the originally filed specification. Appropriate correction is required in further correspondence. Claim 3 is dependent from 1 and thus is rejected on the same basis. Claim 5 recites similar subject matter and is thus rejected on the same basis. Claims 6 and 7 are dependent from claim 5 and thus are rejected on the same basis.

Claim 1 also recites "...determining whether a halftone screen is to be used for said text based on an outcome of said comparison". The implication that no halftone screen is chosen in some instances raises new matter issues and is not commensurate with the originally filed disclosure. As stated on page 3 lines 11-15, either a relatively higher frequency or lower frequency screen is chosen according to the text size and font sharpening threshold value. Appropriate correction is required in further correspondence. Claim 3 depends from claim 1 and is thus rejected on the same basis.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, applicant claims "...wherein rendering said text with said halftone screen comprises...". However, claim 3 is dependent from claim 1 which recites "...rendering said text with or without said halftone screen..." which implies a halftone screen may not be selected in some situations.

Therefore, it is unclear how the selection of the halftone screen in claim 2 can be implemented if no screen is determined from claim 1.

Appropriate correction required in further correspondence.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert P. Loce et al (US 20030058474 A1) in view of Joyce Farrell (Print Quality Metrics for Grayscale Text), Ramesh Nagarajan et al (US 6970598 B1).

Regarding claim 1, Loce discloses receiving a page description language (PDL) file for imaging (“...determining a rendering quality related characteristic of the text component...(for example, from a page description language version of a document” at ¶[36]), said PDL file including said text and a text size value (“...reading a font specification or definition associated with a text component” at ¶[36]);

overriding a previously established font sharpening threshold (as rejected in the Final Rejection Office Action dated July 26, 2007 in which the user may enter a font characteristic “input” from an authoring tool. The characteristic input being that of a sharpening level as previously taught and incorporated herein by reference from previous Office Action) and substituting said user-defined font sharpening threshold (as taught by Nagarajan et al in which the user enters a sharpening threshold via a GUI provided on the printing device. The sharpening level given in the PDL file will be overridden by the sharpening input on the printing device);

comparing said text size value to said user-defined font sharpening threshold (“...the determined rendering quality related characteristic (font size) information is used to guide the selection 730...of a halftone screen...” ¶[39]. As previously rejected in the Office Action dated July 26, 2007 and herein incorporated by reference using the teachings of Nagarajan for providing the user-specified font sharpening threshold value);

determining whether a halftone screen is to be used for said text based on an outcome of said comparison (The selection of the halftone screen as stated above indicates a determination of whether a halftone screen is used); and

rendering said text with or without said halftone screen based on said outcome of said comparison (Fig. 7, numerals 740 and 760).

Loce fails to disclose or suggest providing a user-specified font sharpening threshold, said user specified font sharpening threshold being a separate value from said text size value.

Nagarajan et al in the same field of endeavor teaches providing a user-specified font sharpening threshold ("The filtering method can be chosen to be sharpen...The sharpness...level value is chosen by the user" at column 5 lines 8-10), said user specified font sharpening threshold being a separate value from said text size value (Indicated from the previous insertion of the "character size" as disclosed by Loce ([32]) from the authoring tool and the sharpen level being inserted (via a GUI shown in Fig. 3) at a subsequent time as described in column 3 lines 25-34 of Nagarajan et al.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the method of rendering text using halftone screens chosen according to a font characteristic as disclosed by Loce with the ability to provide a font sharpening threshold level with the sharpening level being a different value than the text size as taught by Nagarajan et al because a "user could be interested in adjusting the automatic mode settings and parameters, for example to conform a specific rendering of data to his own esthetic choices" (Nagarajan et al col. 1 lines 27-30).

Regarding claim 5, Loce discloses a raster image processor for generating a halftone image from a digital representation of objects to be printed (Fig. 8 numerals 814, 818, and 822 from said PDL file as rejected in claim 1 above), said objects including text and said digital representation including a text size value separate from said user-specified font sharpening threshold (see rejection of claim 1), said raster image processor programmed to render said text using a halftone screen with a halftone frequency selected based on overriding a previously established font sharpening threshold with said user-specified font sharpening threshold and performing a comparison of the text size value with said user-defined user-specified font sharpening threshold input by a user via said user interface (see rejection of claim 1 above); and

a raster output device operatively connected to the raster image processor to generate a visible output image using the halftone image output by the raster image processor (“For example, the rendering device 826, may be an ink jet printer” at ¶[49], Fig. 8 numeral 826).

7. Claims 3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loce, Farrell, and Nagarajan as applied to claim 1 above, and further in view of Yee S. Ng et al (US 7079287 B1)

Regarding claim 3, the rejection as advanced in the previous office action dated July 27, 2007 is herein incorporated by reference. Examiner maintains previous grounds of rejection with the amendments to claim 3 having been addressed in the rejection of claim 1 above.

Regarding claim 6 and 7, the rejection as advanced in the previous office action dated July 27, 2007 is herein incorporated by reference. Examiner maintains previous grounds of rejection with the amendments to claim 5 having been addressed above.

Response to Arguments

8. Applicant's arguments with respect to claims 1 and 5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/788,566
Art Unit: 2625

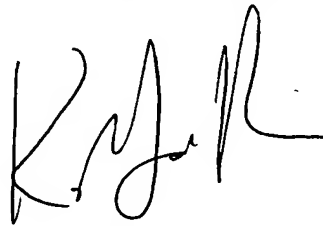
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamare Washington
Junior Examiner
Art Unit 2625


JW

November 26, 2007



KING Y. POON
SUPERVISORY PATENT EXAMINER